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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* SHAHROKH SADJADI

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Appeal 2011-005505  
Application 11/035,635  
Technology Center 2400

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Before ERIC B. CHEN, JEREMY J. CURCURI, and  
GREGG I. ANDERSON, *Administrative Patent Judges*.

CURCURI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-9. App. Br. 2. We have jurisdiction under 35 U.S.C. § 6(b).

Claims 1-9 are rejected under 35 U.S.C. § 103(a) as obvious over Lenz (U.S. 5,566,319; issued Oct. 15, 1996) and Wang (U.S. 5,263,155; issued Nov. 16, 1993). Ans. 3-9.

We affirm.

## STATEMENT OF THE CASE

Appellant's invention relates to techniques for optimistic locking of a shared computer resource object, such as a database object in a database.

Spec. ¶ 2.

Claim 1 is illustrative and reproduced below:

1. A method for managing access to a resource, the method comprising the computer-implemented steps of:
    - receiving a request for access to a particular resource to make an update to the particular resource;
    - generating a lock associated with the particular resource, wherein the lock comprises information that indicates a first value for a version number that is equal to a value for a version number associated with the particular resource and is related to whether the particular resource has been updated;
    - receiving a request to commit the update to the particular resource;
    - determining whether a current value for the version number associated with the particular resource is equal to the first value for the version number indicated in the lock; and
    - if the current value for the version number is equal to the first value for the version number, then converting the lock to a different type of lock and committing the update;
- wherein the method is performed by a system comprising a processor.

## ANALYSIS

The Examiner finds Lenz teaches all limitations of claim 1 except for the use of a version number value, which the Examiner finds is taught by Wang. Ans. 4-5. The Examiner maps Wang's timestamps, used during optimistic transactions, to the recited version number value. Ans. 4-5 (citing Wang, col. 2, ll. 3-16; col. 8, ll. 1-19; Figs. 10, 11). The Examiner reasons that:

[i]t would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to employ the use of a version number value to determine the update status to

the existing system of Lenz. Although the use of a version number value is not recited by Lenz, one would be motivated to use a version number value for determining status of data for proper and valid updating.

Ans. 5.

Appellant argues (i):

A version number, as recited in Claim 1, is related to whether the particular resource has been updated. In contrast, the timestamp of Wang is only based on when the object is committed to the database, *i.e.*, the timestamp is the exact time the object is committed to the database. *See* Wang, col. 7, line 67. The timestamp of Wang provides no indication of whether a particular object has been updated.

App. Br. 7. Appellant argues (ii): “Wang does not describe a lock **including** a version number related to whether a particular resource has been updated.”

App. Br. 9. Appellant argues (iii): “Wang does not describe a conversion of a lock to a different type of lock based on a comparison of a value of a current version number with a value of the version number in the lock.”

App. Br. 9. Finally, Appellant argues (iv): “the obviousness rejection asserted by the Examiner requires changes to the respective functions of the elements described in the prior art references.” App. Br. 11. *See also* Reply Br. 1-4.

In response, the Examiner explains “Wang in step 910 compares the timestamp of a version with the timestamp of the object in the database, clearly showing the relationship between versions and whether updates have been applied.” Ans. 10 (citing Wang, col. 8, ll. 1-19, Fig. 10).

We are not persuaded of Examiner error.

Wang, col. 8, ll. 1-14 describes:

When an optimistic transaction obtains a lock for an object, it notes the time stamp. In step 910 the timestamp of the

version of the object used by the transaction is compared to the timestamp of the object in database 112. If the database version is newer, the object used by the transaction is outdated, and the transaction is aborted, which is done in step 912. If there are no outdated objects, then DBMS 114 would release all the locks held by the transaction and commit the transaction, step 904. Furthermore, in step 904 DBMS 114 updates the timestamp of all objects in database 112 modified during the execution of the transaction. The commit procedure terminates by returning to the calling program, in step 914.

When Wang (step 910, Fig. 10) compares the timestamp of the version of the object used by the transaction to the timestamp of the object in database 112, Wang meets the recited: determining whether a current value (Wang's timestamp of the object in database 112) for the version number associated with the particular resource is equal to the first value (Wang's timestamp of the version of the object used by the transaction) for the version number indicated in the lock.

When Wang (step 904, Fig. 10), if there are no outdated objects, releases all the locks held by the transaction and commits the transaction, Wang meets the recited: if the current value for the version number is equal to the first value for the version number (Wang's checking for outdated objects), then converting the lock to a different type of lock and committing the update (Wang's committing the transaction).

Regarding Appellant's argument (i), we find this argument unpersuasive because Wang's timestamp is related to whether a particular resource has been updated. In reaching our conclusion, we emphasize that Wang teaches (col. 7, l. 67 - col. 8, l.1) the assigned timestamp indicating an object's creation time or most recent modification time, which does relate to whether a particular resource has been updated.

Regarding Appellant's argument (ii), we also find this argument unpersuasive because Wang (col. 8, ll. 1-2) teaches that a transaction obtains a lock and notes the timestamp. Because the noting of the timestamp is directly associated with obtaining the lock, a skilled artisan would recognize the lock as including the timestamp because the lock and timestamp together relate to the optimistic transaction.

Regarding Appellant's argument (iii), we also find this argument unpersuasive because when Wang (col. 8, ll. 7-10) commits the transaction, a skilled artisan would recognize this as a different type of lock. In reaching our conclusion, we emphasise that Wang (col. 8, ll. 1-19) is discussing an optimistic transaction.

Regarding Appellant's argument (iv), we also find this argument unpersuasive. Notably, Wang's timestamp does relate to whether a particular resource has been updated for reasons discussed above.

Weighing Appellant's arguments against the Examiner's findings, we conclude Appellant has not shown error in the Examiner's obviousness rejection of claim 1.

We, therefore, sustain the Examiner's rejection of claim 1 and of claims 2-9 which are not argued separately with particularity.

#### ORDER

The Examiner's decision rejecting claims 1-9 is affirmed.

Appeal 2011-005505  
Application 11/035,635

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED

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